

6173/2003Cont.

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A UE (user equipment) adapted to carry out a A method of executing an interfrequency handover of a ~~UE~~ connection between the UE and a base station in which the frequency of the uplink connection from the UE to a the base station remains the same and the frequency of the downlink connection from said base station to said UE changes from a first downlink frequency to a second downlink frequency, the method comprising:

~~transmitting~~ receiving a request for said handover from said base station, the request containing information indicating the second downlink frequency and information indicating that the uplink frequency remains the same; and

in response to the request, maintaining the physical layer of the uplink connection while changing the downlink frequency from said first downlink frequency to said second downlink frequency.

2. (Currently Amended) A UE method in accordance with claim 1, wherein the information indicates a second downlink frequency which is in a different band than the first downlink frequency.

3. (Currently Amended) A UE method in accordance with claim 1, wherein downlink connection at the first downlink frequency and the downlink connection at the second downlink frequency both contain synchronization information.

6173/2003Cont.

4. (Currently Amended) A UE method in accordance with claim 3, wherein said UE uses said synchronization information ~~is used by the UE~~ to save measurements and to accelerate said handover.

5. (Currently Amended) A UE method in accordance with claim 3, wherein said synchronization information includes system frame numbering.

6. (Currently Amended) A UE method in accordance with claim 3, wherein said synchronization information includes information indicating that the downlink connection at the second downlink frequency is chip and frame synchronized with the downlink connection at the first downlink frequency.

7. (Currently Amended) A UE method in accordance with claim 2, wherein said different band is an extension band which includes frequencies of at least 2.5 GHz.

8. (Currently Amended) A UE method in accordance with claim 1, wherein the first downlink connection and the second downlink connection have the same cell coverage.

9. (Currently Amended) A UE method in accordance with claim 1, wherein transmissions on the uplink connection are paused while the downlink connection is changed from the first downlink frequency to the second downlink frequency.

6173/2003Cont.

10. (Currently Amended) A UE method in accordance with claim 1, wherein transmissions on the uplink connection are continued while the downlink connection is changed from the first downlink frequency to the second downlink frequency

11. (Currently Amended) A UE method in accordance with claim 1, wherein a feedback control loop is discontinued during the handover and is resumed after the handover is completed.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (New) A base station adapted to carry out a method of triggering an inter-frequency handover of a connection with user equipment (UE) in which the frequency of the uplink connection from the UE to the base station remains the same and the frequency of the downlink connection from said base station to said UE changes from a first downlink frequency to a second downlink frequency, the method comprising:

directly measuring the signal strength of an adjacent uplink carrier;

6173/2003Cont.

determining the presence of interference from the adjacent uplink carrier on the basis of said measurement;

if it is determined that interference is present on the adjacent uplink carrier, transmitting a request for said handover to said UE, the request containing information indicating the second downlink frequency and information indicating that the uplink frequency remains the same; and

maintaining the physical layer of the uplink connection while the downlink frequency changes from said first downlink frequency to said second downlink frequency

22. (New) A base station in accordance with claim 21, wherein the information indicates a second downlink frequency which is in a different band than the first downlink frequency.

23. (New) A base station in accordance with claim 22, wherein said different band is an extension band which includes frequencies of at least 2.5 GHz.

24. (New) A base station in accordance with claim 21, wherein downlink connection at the first downlink frequency and the downlink connection at the second downlink frequency both contain synchronization information.

25. (New) A base station in accordance with claim 24, wherein said synchronization information includes system frame numbering.

6173/2003Cont.

26. (New) A base station in accordance with claim 24, wherein said synchronization information includes information indicating that the downlink connection at the second downlink frequency is chip and frame synchronized with the downlink connection at the first downlink frequency.

27. (New) A base station in accordance with claim 21, wherein the first downlink connection and the second downlink connection have the same cell coverage.

28. (New) A base station in accordance with claim 21, wherein transmissions on the uplink connection are paused while the downlink connection is changed from the first downlink frequency to the second downlink frequency.

29. (New) A base station in accordance with claim 21, wherein transmissions on the uplink connection are continued while the downlink connection is changed from the first downlink frequency to the second downlink frequency.

30. (New) A base station in accordance with claim 21, wherein a feedback control loop is discontinued during the handover and is resumed after the handover is completed.

31. (New) A base station in accordance with claim 21, wherein said base station maintains the processing resources related to said uplink connection during the execution of said handover.

6173/2003Cont.

32. (New) A base station in accordance with claim 21, wherein said base station maintains the UL terrestrial connections towards the RNC related to said uplink connection during the execution of said handover.